

ABSTRACT

Disclosed is a magnetic field generator for magnetron plasma. The magnetic field generator is provided with a plurality of magnetic segments, and generates a predetermined multi-pole magnetic field around the periphery of a workpiece substrate within a process chamber. The strength of the multi-pole magnetic field is controlled so that the state of the multi-pole magnetic field is matched different plasma processes. Further, the pattern of the multi-pole magnetic field can be changed so as to match different sizes of the substrate.